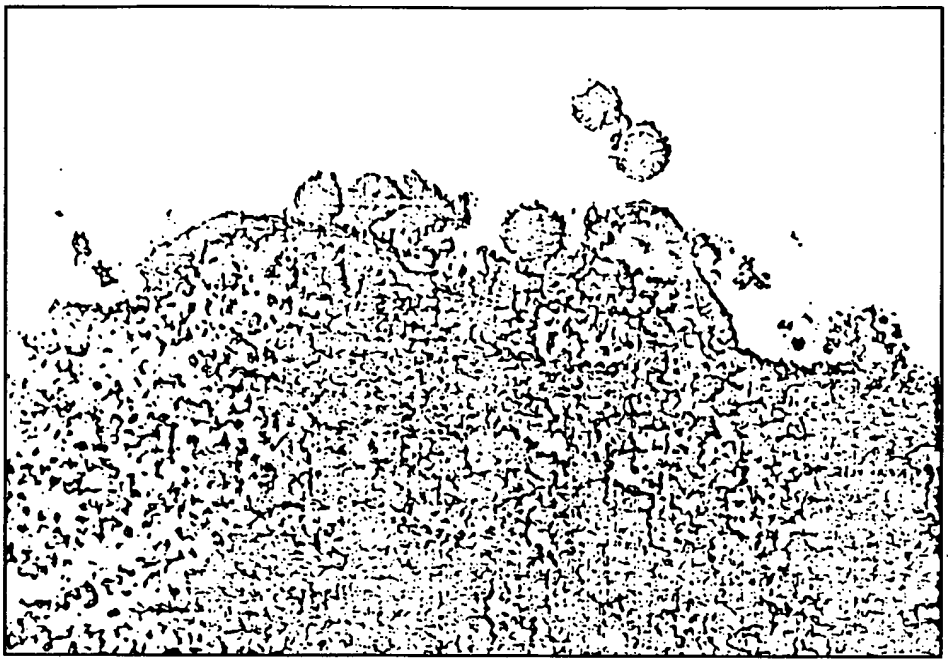
ELECTRON MICROGRAPHS OF ULTRATHIN SECTIONS OF LYMPHOCYTES OF A HEALTHY ADULT DONOR INFECTED WITH THE RETROVIRUS ISOLATED FROM A HAEMOPHILIAC PATIENT WITH AIDS (IDAV2)

NOTE THE NUMEROUS BUDDING WITH PROJECTIONS AT THEIR SURFACE AND A MATURE PARTICLE WITH A SMALL CORE.

FIG. 1

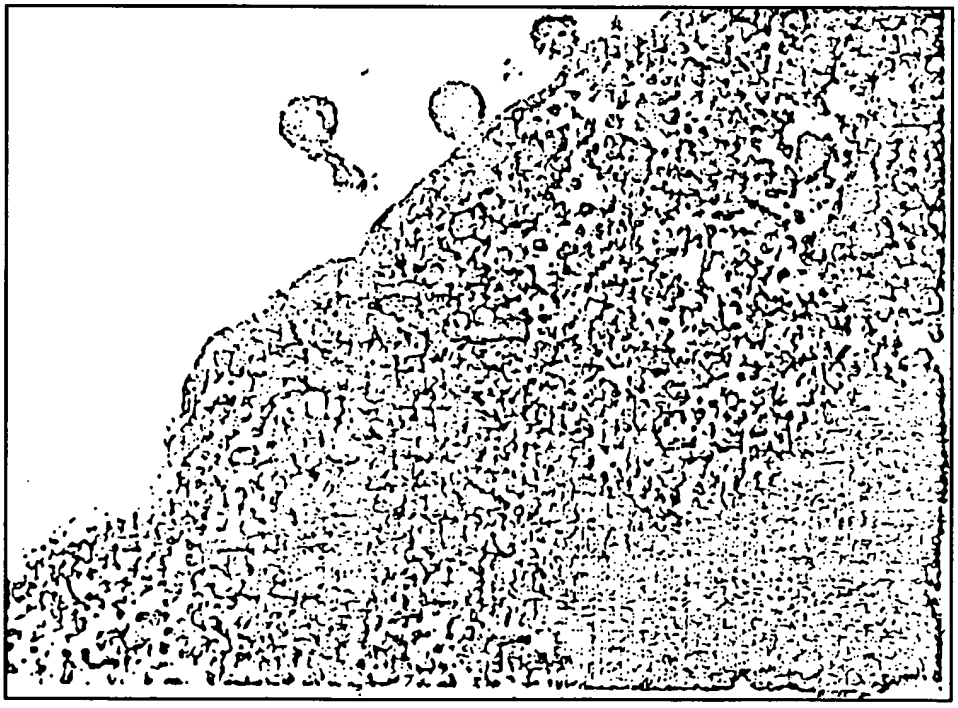
ULTRASTRUCTURAL COMPARISION BETWEEN HTLV AND LAV.



HTLV PARTICLES PRODUCED BY C10 MJ_2 CELLINE.
NOTE THE LARGE CORE OF MATURE PARTICLES AND A TYPICAL BUDDING.

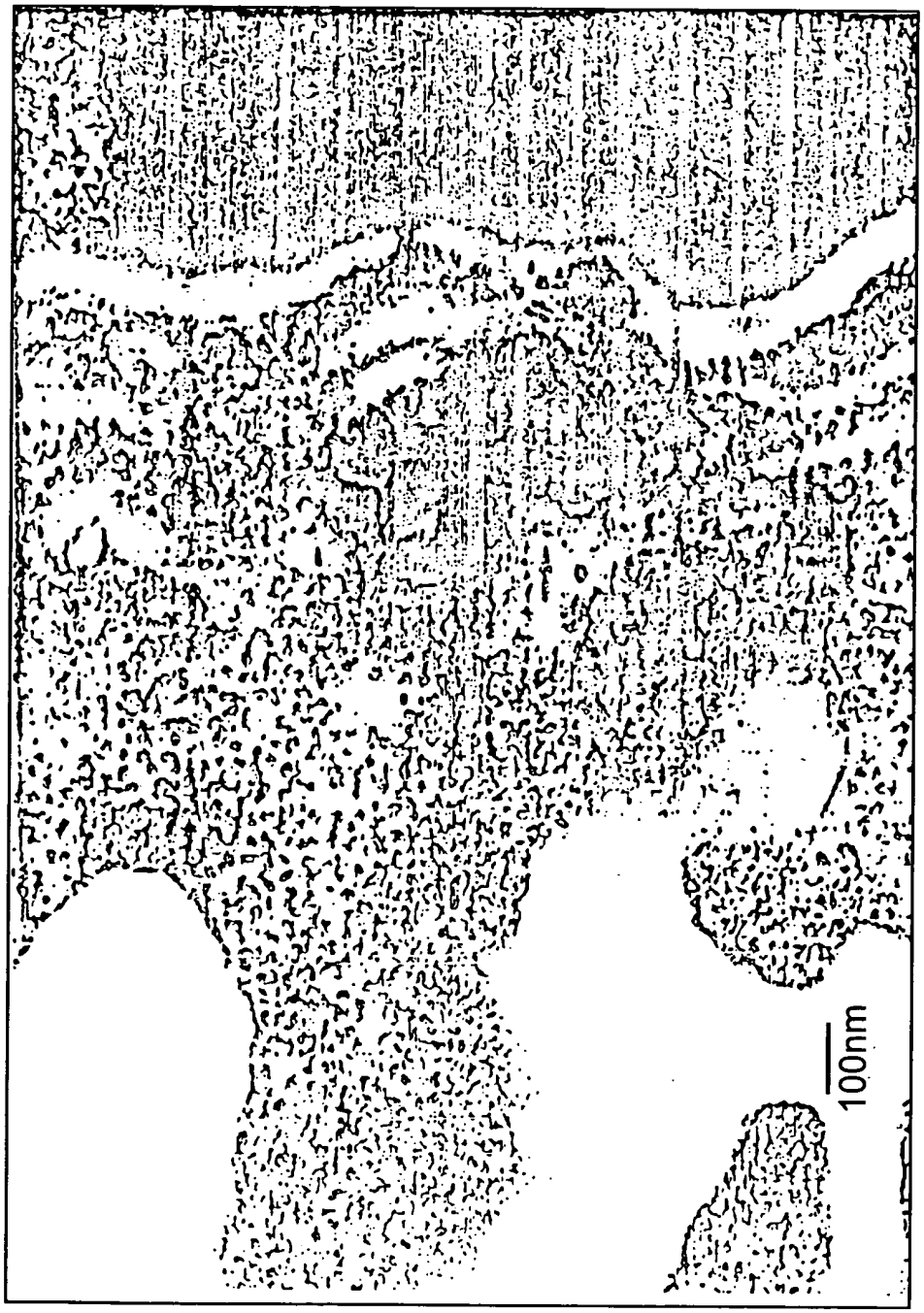
FIG. 2A

ULTRASTRUCTURAL COMPARISION BETWEEN HTLV AND LAV.



LAV MATURE PARTICLES WITH DENSE CORE AND
ONE BUDDING PRODUCED BY INFECTED LYMPHOCYTES.

FIG. 2B



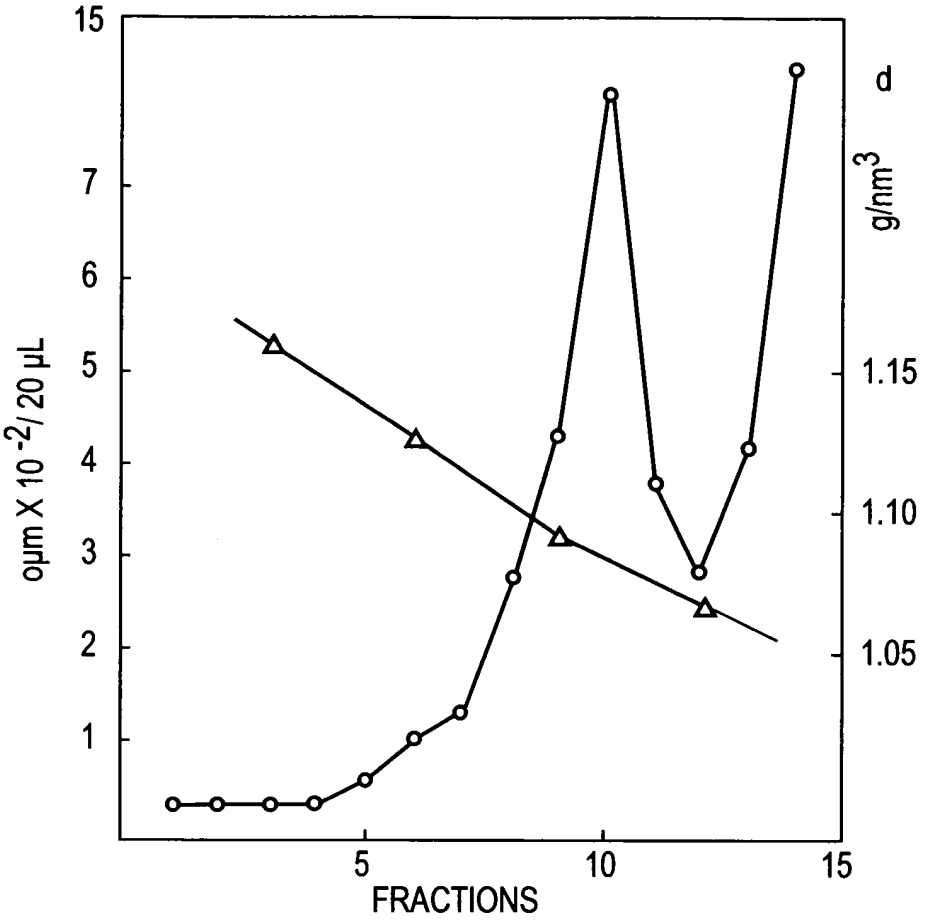
INTRACELLULAR VESICLE IN LAV -INFECTED LYMPHOCYTES
ARROW INDICATES A BUDDING PARTICLE

FIG. 3

ELECTROPHORESIS AND AUTORADIOGRAM OF
^{35}METHIONINE LABELLED LAV.

AUTORADIOGRAM OF THIS GEL, WITH, ON THE LEFT, MOLECULAR WEIGHT MARKERS IN KILODALTONS. NOTE THAT THE p25 PROTEIN COINCIDES WITH THE PEAK OF LABELLED VIRUS AND THAT OF REVERSE TRANSCRIPTASE ACTIVITY (NOT REPRESENTED)

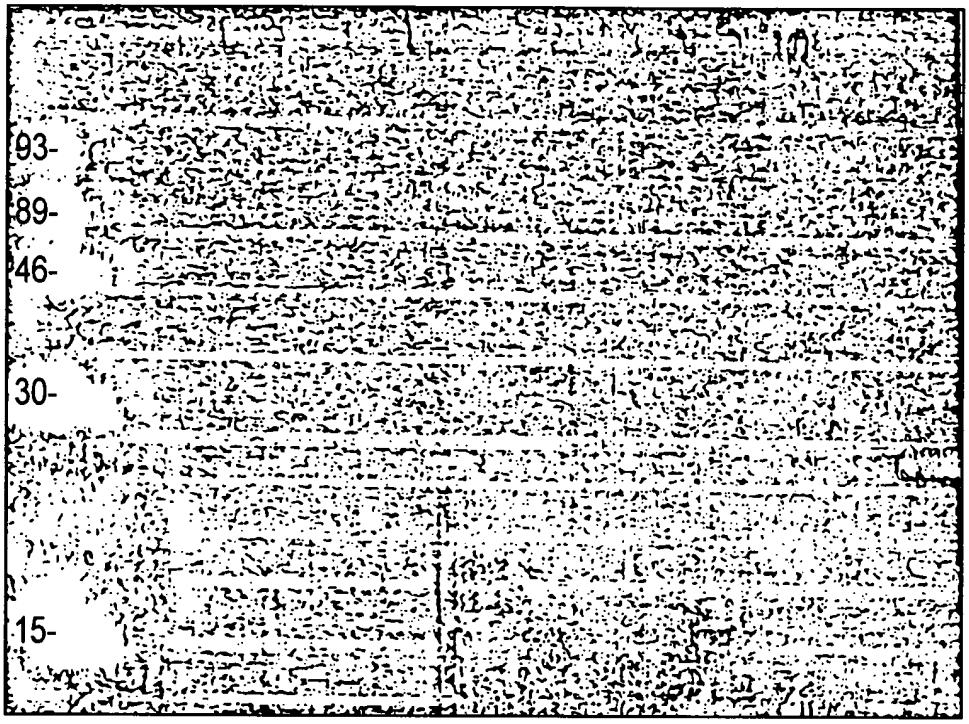
FIG. 4



2ND PANEL: BANDING OF LAV IN A NYCODENZ GRADIENT. INFECTED LYMPHOCYTES FROM A HEALTHY DONOR WERE LABELLED FOR 18 h IN THE PRESENSE OF ^{35}S-METHIONINE, AS DESCRIBED IN [1]. VIRUS WAS PRECIPITATED FROM THE CLARIFIED SUPERNATANT WITH 10% PEG 6000 OVERNIGHT AT 4°C AND THE PELLET WAS RESUSPENDED IN 0.5ml OF NTE BUFFER (0.1M NaCL, 0.01M TRIS, 0.001M EDTA, pH 7.4). IT WAS THEN BANDED TO EQUILIBRIUM IN A LINEAR NYCODENZ (NYEGAAND, OSLO, 5.35%) GRADIENT IN A SW56 ROTOR FOR 3 h AT 45,000 RPM, 2°C. ALIQOUTS OF THE COLLECTED FRACTION WERE ASSAYED FOR RT ACTIVITY (10 ul), RADIOACTIVITY (20 ul;THICK LINE), AND 40 ul WERE ELECTROPHORESED ON A POLYACRYLAMIDE GEL (12.5%) UNDER DENATURING CONDITIONS. DENSITY OF RETROVIRUSES IN NYCODENZ GRADIENTS (LAV OR MuLV) WAS VERY LOW (AROUND 1.10).

FIG. 4B

POLYACRYLAMIDE GEL ELECTROPHORESIS (12.5%)
OF IMMUNE COMPLEXES BETWEEN ^{35}S-LABELLED
VIRUS AND HORSE SERA.



^{35}S LAV WAS PREPARED AND PRECIPITATED WITH PEG (WITHOUT FURTHER PURIFICATION), AS DESCRIBED IN FIGURE 4. THE VIRAL PELLET WAS LYSED IN RIPA BUFFER [1] AND 50-ul ALIQUOTS WERE INCUBATED WITH 5-ul ALIQUOTS OF VARIOUS SERA (1 h AT 37°C, 18 h AT 4°C). IMMUNE COMPLEXES WERE ISOLATED BY PROTEIN A SEPHAROSE BEADS, AS PREVIOUSLY DESCRIBED [1] AND RUN ON THE GELS AFTER DENATURATION (AUTORADIOGRAM):

1= REFERENCE EIAV-INFECTED HORSE SERUM.
2= 1/10 DILUTION OF THE SAME SERUM.
3= ANTI-VISNA GOAT SERUM.
4= 1/10 DILUTION OF SERUM 3.
5,6 AND 7= 3 SERA FROM UNUINFECTED HORSES.
8,9 AND 10= 3 MORE SERA FROM EIAV-INFECTED HORSES.
ARROW INDICATES THE p25 PROTEIN.

FIG. 5